



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/519,666	03/06/2000	Richard Ian Taylor	1263.1195	8730
5514	7590	04/20/2004		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
			EXAMINER AZARIAN, SEYED H	
			ART UNIT 2625	PAPER NUMBER
			DATE MAILED: 04/20/2004 20	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/519,666

Applicant(s)

TAYLOR, RICHARD IAN

Examiner

Seyed Azarian

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-14, 16-20, 21/9-14, 21/16-20, 22/9-14, 22/16-20, 23, 24 is/are rejected.
- 7) ☒ Claim(s) 7, 15, 21/15, 22/15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **RESPONSE TO AMENDMENT**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/2004 has been entered.

2. Applicant's arguments see page 10 through 16, filed 1/12/2004, with respect to the rejection(s) of claims 1-24 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kirsten (U.S. patent 6,011,901) and Kosaka (U.S. patent 4,916,540).

## **Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1,5-6, 9, 13-14, 16-19, 21/9, 21/13-14, 21/16-19, 22/9, 22/13-14, 22/16-19 and 23, are rejected under 35 U.S.C. 102(e) as being anticipated by Kirsten (U.S. patent 6,011,901).

Art Unit: 2625

Regarding claim 1, Kirsten discloses an apparatus for processing image data defining a plurality of input images of a changing scene recorded at different time from at least one of different viewing position and different viewing directions to generate data for defining a sequence of images conveying an evolving representation of the scene from a fixed viewing position and direction comprising: (column 5, lines 21-38, time-lapse processing, also column 8, lines 32-54, series of images connected in time sequence to convey motion or time related activity, also column 13, lines 1-11, fixed-view image sequences characteristic of surveillance video);

An image-registering unit, arranged to register the input images so that the registered input images represent the scene from the same viewing position and direction (Fig. 8, column 11, lines 38-61, phase registration and measurement are derived from synchronization data of all video stream, and column 28, lines 33-44, calculation at different rate and time);

And a pixel value interpolator arranged to interpolate between pixel values of the registered input images to generate pixel values for interpolated images from the same viewing position and direction relative to scene for the image sequence (Fig. 14, column 17, line 59 through column 18, line 9, reducing the pixel density of images by resampling pixels through interpolation).

Regarding claim 5 and 13, Kirsten discloses apparatus, wherein the pixel value interpolator is arranged to generate the pixel value using linear interpolation (column 23, lines 28-46, the data profiles by the enhanced loop constant value data rate and linear-time storage accumulation targets by the basic control loop).

Art Unit: 2625

Regarding claim 6, Kirsten discloses apparatus, wherein the pixel value interpolator is arranged to generate pixel values for interpolated images to be displayed in the image sequence in which each input image is to be displayed a plurality of consecutive times (see claim 1, and column 15, lines 50-65, sequence of images are to be decompressed and displayed).

Regarding claim 16, Kirsten discloses a method according to claim 9, further comprising a step of generation a signal conveying data from which the sequence of images can be generated (column 8, lines 33-54, series of images connected in time sequence to convey motion or time activity).

Regarding claim 17, Kirsten discloses a method according to claim 16, wherein the signal comprises image data (column 9, lines 6-16, image data and the synchronization signals from the analog video).

Regarding claim 18, Robert discloses a method according to claim 16, further comprising the step of recording the signal either directly or indirectly (column 9, lines 54-65, separate recording device).

Regarding claim 19, Kirsten discloses a method according to claim 16, further comprising a step of displaying the sequence of images (column 9, line 65 through column 10, line 9, displaying images).

Regarding claim 21, Kirsten discloses a storage device storing computer-useable instruction for causing a programmable processing apparatus (Fig. 12 A, column 15, lines 12-24, storage device).

Regarding claims 9, 14 and 22-23, the arguments analogous to those presented for claims 1, 6 and 21, are applicable.

**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 8, 10-12, 20, 21/10-12, 21/20, 22/10-12, 22/20 and 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirsten (U.S. patent 6,011,901) in view of Kosaka (U.S. patent 4,916,540).

Regarding claim 2, Kirsten fails to disclose, "transformation calculator, calculate transformation to transform the input images". On the other hand Kosaka in the same field of photography teaches video memory with special effect image transformation and converter for converting the read-out address generating circuit including a coefficient calculator defining a function of a tracing curve (column 1, lines 33-56).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made, to modify Kirsten invention according to the teaching of Kosaka because it provides a special effect for the camera which produces a new image transformation between previously designated image that can easily be implemented in an image device such as video camera.

Art Unit: 2625

Regarding claim 8, Robert discloses image-processing apparatus for calculating transformations to register input image with different viewing position (Fig. 1, column 4, lines 28-39, refer to different frames or references are differentiated by instants corresponding to the frames and frames are supplied by a source of video signals such as a conventional television camera);

and a pixel value interpolator for interpolating between the pixel values of the registered input images to generate pixel values for interpolated images for the image sequence (column 3, lines 24-32, refer to interpolation of images for an interpolated luminance value for each pixel of an image called the image to interpolated).

Regarding claim 21, Kirsten discloses a storage device storing computer-useable instruction for causing a programmable processing apparatus (Fig. 12 A, column 15, lines 12-24, storage device).

Regarding claims 3-4, 10-12, 20 and 24, the arguments analogous to those presented for claims 2 and 8 are applicable.

Regarding claim 22, the arguments analogous to those presented for claim 21 is applicable.

### Allowable Subject Matter

6. Claims 7,15, 21/15 and 22/15, are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims.

*Other prior art cited*

Art Unit: 2625

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. patent (5,625,410) to Washing et al is cited for video monitoring and conferencing system.

U.S. patent (6,011,901) to Kirsten is cited for compressed digital video record and playback system.

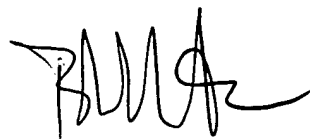
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (703) 306-5907. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian  
Patent Examiner  
Group Art Unit 2625  
March 24, 2004



**BHAVESH M. MEHTA**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**